the hind-limbs must have preceded the fore-limbs in their thorough adaptation to the cnrsorial mode of progression.

FJGL. 32.—Anterior aspect of right femur of Rhinoceros (*Rhinoceros indicus*"). x i.

In the Mammalia the ankle-joint is always what is termed cruro-tarsal, *i.e.* between the ends of the limb-bones and the proximal row of tar sals; not in the middle of the tarsus as in some Sauropsida (reptiles arid birds). The bones of the ankle are much like those of the hand ; but there are never more than two bones in the proxi- mal row, which are the astragalus and the calcaneum. The former is perhaps to be looked upon as the equivalent of the cuneiform and lunar together. Kut the views as to the homologies of the tarsai bones differ widely. IRelow these is the navicular, regarded as a centrale. The distal row of the tarsus has four bones, three cuneiforms and a cuboid. Reduction is effected by the soldering together of two cuneiforms as in the Horse, by the fusion of the navicular and cuboid as in the Deer. 2STo mammal has more than five toes, and the number tends to become reduced in cursorial animals (Rodents, Ungulates, Kangaroos).

Teeth.--The teeth of the

Mammalia[x] differ from those of other vertebrated animals in a number of important points. These, however, entirely concern the form of the adult teeth, their position in the mouth, and the succession of the series of teeth. 3Developmentally and histologically there are no fundamental divergences from the teeth of vertebrates lower in the scale.

In mammals, as for example in the Dog, the teeth consist of three kinds of tissue—the enamel, the dentine, and the cement. The enamel is derived from the epidermis of the mouth cavity, and the two remaining constituents from the underlying dermis.

The teeth originate quite independently of the jaws, with which they are later so intimately connected ; the independence of origin being one of the facts upon which the current theory

[1] Of. Tomes, *A. M'a.nual of Dental Anatomy,* 5th ed. London, 1898.